Appendix G

Target Acquisition TAB to the Field Artillery Support Plan

The purpose of the TA tab to the FA support plan appendix is to assign missions, consolidate field artillery TA assets, establish target processing flow, and assign and coordinate responsibilities not covered in unit SOPs. This appendix explains the preparation of the TA tab and its enclosures.

SECTION I - TARGET ACQUISITION TAB

DESCRIPTION

The TA tab is a managerial tool used primarily by the DIVARTY (or FA brigade) and DS battalion staffs. It is used to ensure that all TA assets are employed to support the overall combined arms operation. Although no specific format for the tab is prescribed, the five-paragraph operation order format is used when the TA tab is issued separately from the FA support plan. The TA tab is an integral part of the field artillery support plan, which is an appendix to the fire support annex of the operation order. This hierarchy is shown below:

- Operation Order _____(52d Mech Inf Div).
- Annex D (Fire Support).
- Appendix _____(Field Artillery Support Plan).
- Tab _____(Target Acquisition).
- Enclosures_____(ex. Capabilities Overlay).

PREPARATION

In the DIVARTY headquarters, the DIVARTY S2 is responsible for the preparation of the TA tab. He is assisted by the counterfire officer, the TAB commander, the assistant counterfire officer, and the targeting officer. In the FA brigade, the TA tab also is developed by the S2 assisted by the targeting officer. In separate maneuver brigades, the TA tab is produced jointly by the FA battalion S2 with assistance from the S3, and targeting officer. The TA tab usually consists of the heading, five major paragraphs, and the enclosures. The TA TAB is normally produced at the DIVARTY/ FA BDE.

TARGET ACQUISITION TAB HEADING

The tab heading includes the security classification, the title line, references, and the time zone used throughout the operation. The classification is shown at the top and bottom of each page of the document. Refer to figure G-1.

(CLASSIFICATION)

TAB A (TARGET ACQUISITION) TO APPENDIX _____ (FA SUPPORT PLAN) TO ANNEX D (FIRE SUPPORT) TO OPORD _____.

References: Map, Series (Number and Geographic Area, If Necessary), Sheet Number(S) (And Name, If Necessary), Edition _____, Scale _____.

Time Zone Used Throughout: (ALL CAPS)

Figure G-1. Target Acquisition Tab Heading

MAJOR PARAGRAPHS

SITUATION (PARAGRAPH 1)

This paragraph includes the friendly situation, supported units, and other TA assets in sector. Include specific enemy and friendly information that form a basis for threat assessments required for the radar deployment order.

MISSION (PARAGRAPH 2)

This paragraph should be a clear, concise statement of the target acquisition mission. It contains who, what, when, where and why.

EXECUTION (PARAGRAPH 3)

The execution paragraph explains how the mission will be accomplished. It contains the following subparagraphs:

- Concept of the Operation. This subparagraph (3a) gives the commander's concept for target acquisition. This should include identification of designated cueing agents and general cueing guidance. Specific cueing guidance is listed in the coordination subparagraph (3e).
- Processing. The processing subparagraph (3b) is used to denote target processing flow. This targeting information flow describes the relationship between the target acquisition asset and the headquarters controlling it. This paragraph does not represent the actual communications nets used but shows the destination flow of targeting information. This paragraph should list all field artillery TA assets and headquarters controlling them. The following are examples of the types of information that may be included in the processing subparagraph:
  - AN/TPQ-36 section reports targets to the controlling DS battalion FDC.

  - AN/TPQ-37 section reports targets to the DIVARTY (or FA brigade) target processing section.
  - Aerial observers report targets to the controlling headquarters TOC.
  - DS battalions report targeting data to the DIVARTY TOC.
  - DIVARTY TOC will exchange targeting information with the supporting FA brigade TOC (especially when it acts as the alternate DIVARTY TOC).

The target processing flow is based on the tactical situation and command relationships.

- Visual Observation. This subparagraph (3c) covers ground observation. Ground observation is also covered in Enclosure 1 to the TA tab, which is the consolidated visibility diagram. This diagram covers the entire division sector to include forward observers. Time is a critical factor in assembling this enclosure.
- Radar. This subparagraph (3d) deals with the command relationships assigned to FA radars. FA radars may be assigned a command relationship of attached/OPCON/TACON to FA battalions or higher FA headquarters. An example mission for an AN/TPQ-36 section might be as follows: AN/TPQ-36, Section 3, Btry C, 1-30 FA; Mission: Attached to 1-51 FA (See RDO, Enclosure 5.)
- Coordination. The coordination subparagraph (3e) covers information that is not addressed in the unit tactical standing operating procedure (TACSOP). As a minimum, the paragraph should contain the following:
  - The requirement for the supported DS battalion to report radar locations and sectors of search to the DIVARTY target processing section.
  - Cueing guidance established by the DIVARTY counterfire officer.
  - Common sensor boundary (CSB). Firefinder radars sharing or having overlapping search sectors need to be identified. Consideration must then be given to the establishment of a CSB. The CSB is indicated by a series of grid coordinates to define its location.
  - Coordination for communications nets and relays, if required.
  - Additional coordination for survey and security, if required.

SERVICE SUPPORT (PARAGRAPH 4)

This paragraph lists service support requirements as required. It may refer to the service support annex.

COMMAND AND SIGNAL (PARAGRAPH 5)

The fifth paragraph lists required information as necessary. It may refer to the fire support annex.

ENCLOSURES

Enclosures to the TA tab should include the following:

- Enclosure 1 is a consolidated visibility diagram. Contains visibility information for non-radar type observers (i.e. STRIKERS).
- Enclosure 2 is a capabilities overlay. It normally contains the following:
  - Major unit boundaries, FEBA, and FLOT.
  - Major search sectors to include primary and alternate sectors, zones with type and number, and radar type and section description. Primary zones are depicted by solid lines, alternate zones, by dotted lines. Section SOPs should specify color coding for individual radar data.
  - Common sensor boundary, drawn as a solid line labeled with CSB and the effective DTG.
  - Major unit locations, especially those covered by the CFZ.
  - Overlay title, classification, and register marks.
- Enclosures 3 through 5 are the AN/TPQ-36 RDOs.
- Enclosures 6 through 7 are the AN/TPQ-37 RDOs.

It may not always be possible to include all RDOs as enclosures. This is especially true for radars attached to subordinate FA battalions.

The following sample TA TAB provides an example of how a TA TAB might be constructed.

SAMPLE TA TAB TO FA SUPPORT PLAN

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TAB A (TARGET ACQUISITION) TO APPENDIX 2 (FA SUPPORT PLAN) TO ANNEX D (FIRE SUPPORT) TO OPERATION ORDER 01-1 (GOLD DRAGON), 52D Mech Div.

References: Map, series M745, DEUTSCHLAND, sheet L5118
(Marburg)
Edition: Ausgabe 4 DMG
Scale: 1:50,000

Map, series M745, DEUTSCHLAND, sheet L5120
(Ziegenheim)
Edition: Ausgabe 4 DMG
Scale: 1:50,000

Map, series M745, DEUTSCHALND, sheet L5318
(Amoneburg)
Edition: Ausgabe 4 DMG
Scale: 1:50,000

Map, series M745, DEUTSCHLAND, sheet L5320
(Alsfeld)
Edition: Ausgabe 4 DMG
Scale: 1:50,000

Time Zone Used Throughout: ZULU

1. SITUATION.

The enemy offensive has been halted, resulting in the current dispositions. Intelligence reports indicate the enemy is regrouping and is capable of launching a new offensive within 48 hours. See Annex B (Intelligence).

2. MISSION.

On order, the target acquisition assets of the 52d Mech Div, Btry C [TA], 1-30 FA, and STRIKER teams will acquire targets, initiate fire missions, and report combat and/or targeting information in support of offensive operations in zone to defeat the enemy and prevent his massing for a new offensive.

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SAMPLE TA TAB TO FA SUPPORT PLAN (CONTINUED)

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TAB A (TARGET ACQUISITION) TO APPENDIX 2 (FA SUPPORT PLAN) TO ANNEX D (FIRE SUPPORT) TO OPERATION ORDER 01-1 (GOLD DRAGON), 52D Mech Div.

3. EXECUTION

a. Concept of Operation. 52d Mech Div target acquisition assets will deploy well forward in sector to locate high-payoff targets and protect friendly forces, with long-range TA assets acquiring targets at maximum range to support the offensive operation to reestablish the international border. Priority of TA effort to 1st Bde then 2d Bde.

b. Processing. General support radars will send their targeting information directly to the DIVARTY TOC. Radars direct support to DS FA battalions will report information to their respective battalions. Targeting information developed at DS battalion level will be sent to DIVARTY.

c. Visual Observation. STRIKERs will report location and zone of observation thru BDE FSE to the DS FA Battalion.

d. Radar. See capabilities overlay at Enclosure 2.

(1) AN/TPQ-36, Sec 1, Btry C (TA), 1-30th FA
Mission: Attached to 1-90 FA (155, SP)
See RDO, Encl 3 (omitted)

(2) AN/TPQ-36, Sec 2, Btry C (TA), 1-30th FA
Mission: Attached to 2-90 FA (155, SP)
See RDO, Encl 4 (omitted)

(3) AN/TPQ-36, Sec 3, Btry C (TA), 1-30th FA
Mission: Attached to 3-90 FA (155, SP)
See RDO, Encl 5 (omitted)

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SAMPLE TA TAB TO FA SUPPORT PLAN (CONTINUED)

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TAB A (TARGET ACQUISITION) TO APPENDIX 2 (FA SUPPORT PLAN) TO ANNEX D (FIRE SUPPORT) TO OPERATION ORDER 01-1 (GOLD DRAGON), 52D Mech Div.

(4) AN/TPQ-37, Sec 4, Btry C (TA), 1-30th FA
Mission: Attached 52d DIVARTY (155, SP)
See RDO, Encl 6

(5) AN/TPQ-37, Sec 5, Btry C (TA), 1-30th FA
Mission: Attached 52d DIVARTY
See RDO, Encl 7 (omitted)

e. Coordination.

(1) Survey. Radar Sections 1 through 3 will receive survey support from their respective DS battalions. Cdr, Btry C (TA), 1-30th FA will provide survey support for Radar Sections 4 and 5.

(2) Common Sensor Boundary. Effective 0100001Z a common sensor boundary will be established along PL DOG. Once 1st Bde has completed fording operations vic NB191353 and secured Objective BONE, a new common sensor boundary will be established along PL CAT.

(3) Reports. DS battalions will report radar locations, sectors of search, and planned CFFZs, and CFZs to DIVARTY for all attached radars.

(4) Met. Q-36 coordinates for met data from DS battalion TOC; Q-37 receives data from DIVARTY TOC.

(5) Cueing. Maximum radiation time is based on the current ELINT threat assessment. The DIVARTY S2/CFO will update the ELINT threat throughout the mission on the DIVARTY CF net. Designated cueing agents for Q-36 are DS battalion S2, task force FSO, and brigade FSO. Q-37 cueing agents will be the DIVARTY CFO and reinforcing FA brigade S2.

(6) Firefinder Zones. Commander's guidance states all maneuver objectives when occupied will be covered by CFZs within the radar boundaries. DS battalion S2s will ensure that suspected artillery positions are covered by CFFZs. 2d Bde Q-36 ensure that a CFFZ is input for the town of STRANG vic NB1045. No CFFZs are to be placed outside boundaries. Force protection zones (CFZs) will be planned by the appropriate FSEs.

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SAMPLE TA TAB TO FA SUPPORT PLAN (CONTINUED)

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TAB A (TARGET ACQUISITION) TO APPENDIX 2 (FA SUPPORT PLAN) TO ANNEX D (FIRE SUPPORT) TO OPERATION ORDER 01-1 (GOLD DRAGON), 52D Mech Div.

4. SERVICE SUPPORT

Radar Sections 1 through 3 will receive logistical support from their respective DS battalions. Cdr, 2-19 FA (MLRS) will provide logistical support for Radar Sections 4 and 5.

5. COMMAND AND SIGNAL

a. Command. Btry C (TA), 1-30 FA TOC located at NB050670.

b. Signal. Current SOI KTU 1062, Edition BB in effect.

Encl 1: Visibility Diagram.
Encl 2: Capabilities Overlay.
Encl 3-5: RDO. Radar Sections 1 through 3 (AN/TPQ-36) (omitted)
Encl 6: RDO, Radar Section 4 (AN/TPQ-37).
Encl 7: RDO, Radar Section 5 (AN/TPQ-37) (omitted).

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D-1-A-4

SAMPLE TA TAB TO FA SUPPORT PLAN (CONTINUED

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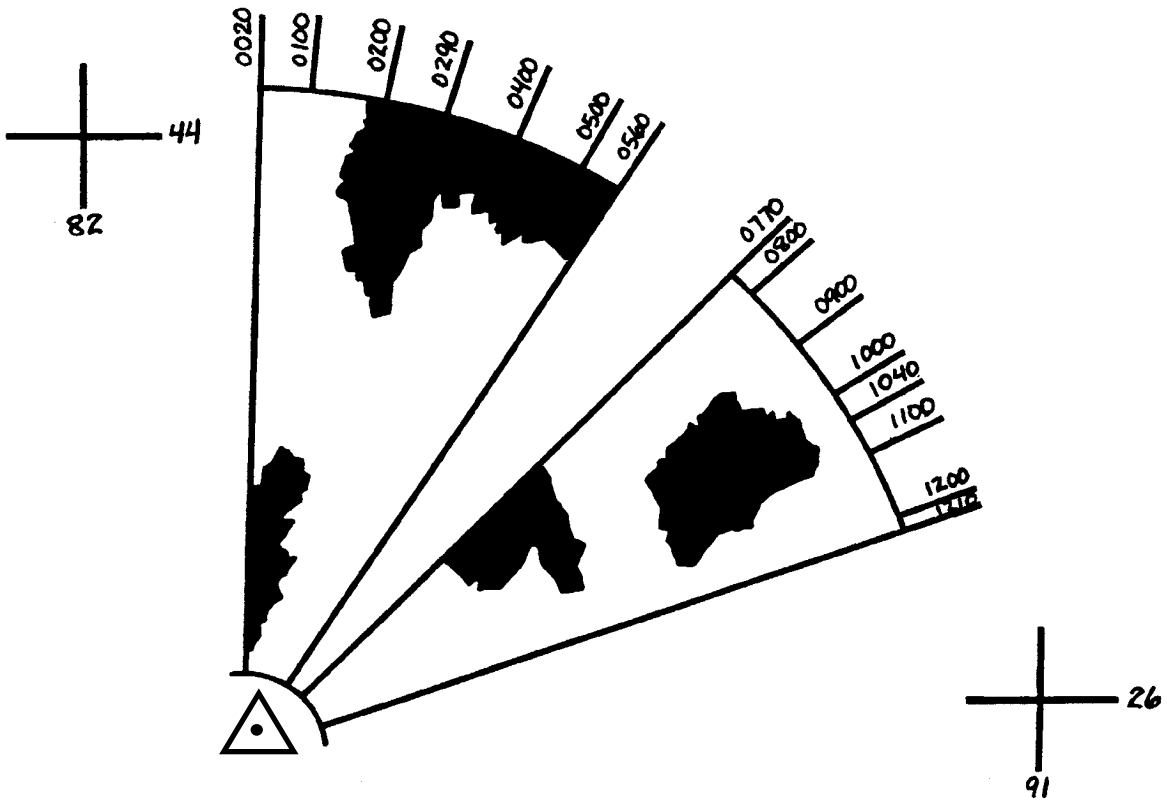
ENCLOSURE 1 (VISIBILITY DIAGRAM) TAB A (TARGET ACQUISITION) TO APPENDIX 2 (FA SUPPORT PLAN) TO ANNEX D (FIRE SUPPORT) TO OPERATION ORDER 01-1 (GOLD DRAGON), 52D Mech Div.



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SAMPLE TA TAB TO FA SUPPORT PLAN (CONTINUED)

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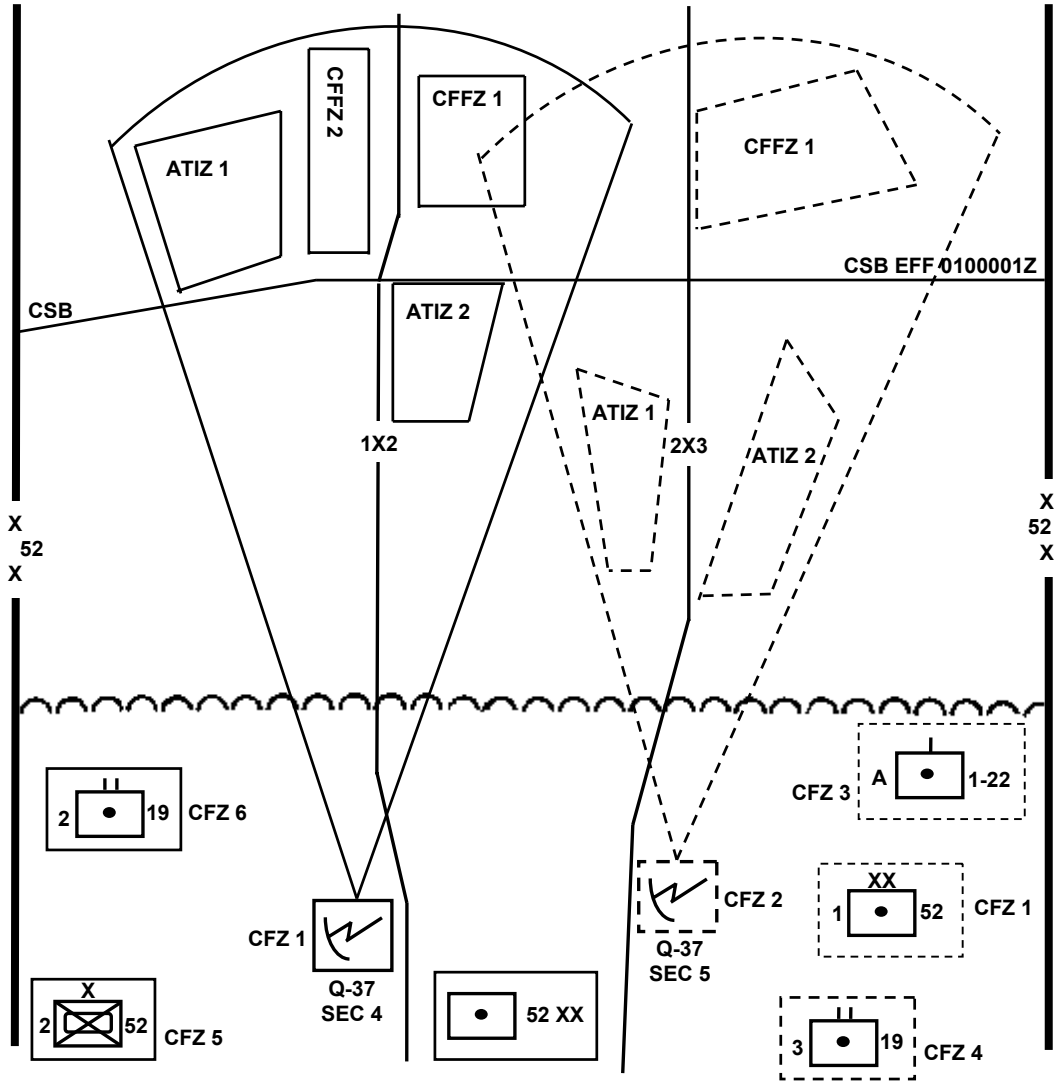
ENCLOSURE 2 (CAPABILITIES OVERLAY) TAB A (TARGET ACQUISITION) TO APPENDIX 2 (FA SUPPORT PLAN) TO ANNEX D (FIRE SUPPORT) TO OPERATION ORDER 01-1 (GOLD DRAGON), 52D Mech Div.



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SAMPLE TA TAB TO FA SUPPORT PLAN (CONTINUED)

ENCLOSURE 6, TAB A (TARGET ACQUISITION) TO APPENDIX 2 (FA SUPPORT PLAN) TO ANNEX D (FIRE SUPPORT) TO OPERATION ORDER 01-1 (GOLD DRAGON), 52D Mech Div.

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RADAR DEPLOYMENT ORDER

For use of this form, see FM 6-121. The proponent agency is TRADOC.

SECTION	1/A/1-30 FA Q-36/(Q-37)	MISSION	ATTACHED 52 DIVARTY
LOCATION	Primary		Alternate

SEARCH SECTOR

	Left Edge	Right Edge	Minimum Range	Maximum Range
Primary Azimuth 0290	0020 mils	056 mils	450 meters	18,280 meters
Alternate Azimuth 1040	077 mils	1210 mils	450 meters	18,280 meters

EW THREAT ASSESSMENT

EW Threat (Yes or No)	Affecting Friendly Assets (Yes or No)	Type of Threat (Air or Ground)

NOTE: Use the Firefinder survivability flowchart in FM 6-121 to determine emission limits.

CUEING AGENTS (CALL SIGN AND DESIGNATION) IN PRIORITY

M4T43 52 DIVARTY TOC	T6B41 52 DIV G2	K7C10 20FA BDE TOC
A4C72 OH-58D, SEC 3		

REPORTING CHANNELS

DIVARTY TA/INTEL M4T51	DIVARTY CMD M4T30

ZONE DATA

Type and Number	Description and/or Command Priority	Grid Coordinates of Zone Corner Points					
ATIZ-2	SUSPECT ARTY	NB025752	NB025730	NB971702	NB962750		
ATIZ-3	SUSPECT ARTY	NB100470	NB120470	NB120450	NB100450		
CFFZ-4	DAG PRI 1	NB100783	NB124783	NB124710	NB100710		
CFFZ-5	AAG PRI 2	NB030785	NB067785	NB067695	NB030695		

DA FORM 5957-R, OCT 2000

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D-1-A-3-1

SECTION II - RADAR DEPLOYMENT ORDER

DESCRIPTION

The RDO (DA Form 5957-R) is an enclosure to the TA tab. DA Form 5957-R replaces DA Form 5364-R (Commander's Target Criteria Message). The RDO designates the information required by each radar section leader to deploy his radar section and begin operations. **NOTE:** This form may be modified.

RESPONSIBILITIES

DIRECT SUPPORT BATTALION S2

The DS battalion S2 is the TA manager for assets attached/OPCON/organic to the battalion. He is responsible for developing and issuing the RDO to the radar section leader (MOS 131A). When developing an RDO, the S2 must coordinate with the maneuver brigade targeting officer (brigade FSE) to integrate TA assets into the overall scheme of maneuver and collection plan.

DIVISION ARTILLERY COUNTERFIRE OFFICER

The counterfire officer is the TA manager for the division artillery. He is responsible for developing and issuing RDOs to radar sections that are controlled by division artillery.

FA BRIGADE COUNTERFIRE OFFICER

The brigade CFO has the same responsibilities as the DIVARTY CFO for TA assets under control of the FA brigade.

DA FORM 5957-R

The instructions for completing DA Form 5957-R are explained below.

- Heading. In the first block, list the radar section number, and circle the type of radar involved. In the second block, enter the mission.
- Location. Enter a primary and an alternate general position area for the section. The radar section leader will select the actual site and report its location.
- Search Sector. In this section, describe the search sector. Select a primary azimuth only. Then determine the left and right sector edges. These edges are normally approximately 800 mils left and right of the primary azimuth. Range search limits can be specified.
- EW Threat Assessment. In this section indicate the EW threat assessment. Specify whether an EW threat exists, if it is affecting friendly assets, and the type of threat. If there is an EW threat you may use the Firefinder survivability flow chart in conjunction with the commanders risk assessment and METT-TC to determine emission limits.
- Cueing Agents. In this section list, in priority by call sign, agents that can cue the radar.

- Reporting Channels. In this section list the communications nets on which the radar is to operate. Include the call sign for each.
- Zone Data. In this section include zone data. List the type of zone and zone number (for example CFZ1), and coordinates of the zones (minimum of three points and maximum of six points). In the description column, list the description of the activity (if any) in the zone. Also list the command priority for CFFZs when upgraded from priority 2. (See sample RDO Figure G-2). Procedures for developing zone data are found in Chapter 4.

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RADAR DEPLOYMENT ORDER

For use of this form, see FM 6-121. The proponent agency is TRADOC.

SECTION 2/C/1-30 FA (Q-36/Q-37)		MISSION ATTACHED 2-90 FA	
LOCATION Primary NB230200		Alternate	

SEARCH SECTOR

	Left Edge	Right Edge	Minimum Range	Maximum Range
Primary Azimuth 1100	-800 mils	+800 mils	750 meters	24,000 meters
Alternate Azimuth	mils	mils	meters	meters

EW THREAT ASSESSMENT

EW Threat (Yes or No)	Affecting Friendly Assets (Yes or No)	Type of Threat (Air or Ground)

NOTE: Use the Firefinder survivability flowchart in FM 6-121 to determine emission limits.

CUEING AGENTS (CALL SIGN AND DESIGNATION) IN PRIORITY

A4Q02 S2, 2-90	B2N44 FIST A/1-44AR	C2O22 FSO, 2 BDE
N2N08 OH-58D, SEC	N2N09 OH-58D, SEC 2	D6C01 9th DIVARTY TOC

REPORTING CHANNELS

FD1 (1-30 FA) A4Q01	1-30 FA CMD NET A4Q06

ZONE DATA

Type and Number	Description and/or Command Priority	Grid Coordinates of Zone Corner Points					
CFFZ 1	RAG PRI 1	NB290245	NB300250	NB320250	NB330245	NB320240	NB300240
CFFZ 2	DAG PRI 2	NB370270	NB430250	NB390220			
CFFZ 3	SUSP ARTY PRI 2	NB30022	NB320220	NB320190	NB300190		
CFZ 1	2/F/25	NB228202	NB232202	NB232198	NB228198		
CFZ 2	1-30FA TOC	NB205233	NB210235	NB220235	NB225233	NB220230	NB210230
CFZ 3	3-30FA TOC	NB240350	NB250360	NB260350	NB250345		
CFZ 4	1 BDE TOC	NB160215	NB170220	NB180220	NB180210	NB175205	NB170205
CFZ 5	1/F/25	NB268182	NB27218	NB272178	NB268178		
ATIZ 1	SUSP ARTY	NB400190	NB430210	NB450210	NB450170	NB43017	

DA FORM 5957-R, OCT 2000

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Figure G-2. Radar Deployment Order (DA Form 5957-R)

AUTOMATED RADAR DEPLOYMENT ORDER PROCEDURE

The radar deployment order (RDO) is used to establish the location and/or coverage area of a radar unit. The normal method used to send a RDO to a radar from an AFATDS equipped unit is to open the radar unit icon menu and select RDO. The user then selects Current Location**:** or Next Location**:** radio button to determine the unit location to be sent for the deployment. The Next Location**:** field can be use to inform the AFATDS operator of a possible future deployment location. Unlike the NEXT radio button that acts as a movement order, the Next Location field is information only. This information remains resident in the AFATDS and is not transmitted to the radar. The Effective Time**:** is the time that the unit is operational at the new location or capable of a new coverage area. The range fan is then determined by entering the Direction Of Search (mils), Right Azimuth (mils), and Left Azimuth (mils). Radar Zones are added or removed from the list as required. Radar zones must be built in the geometry files before the can be added to the RDO. The Send button then saves the data to the database and transmits the RDO. See Figure G-3.

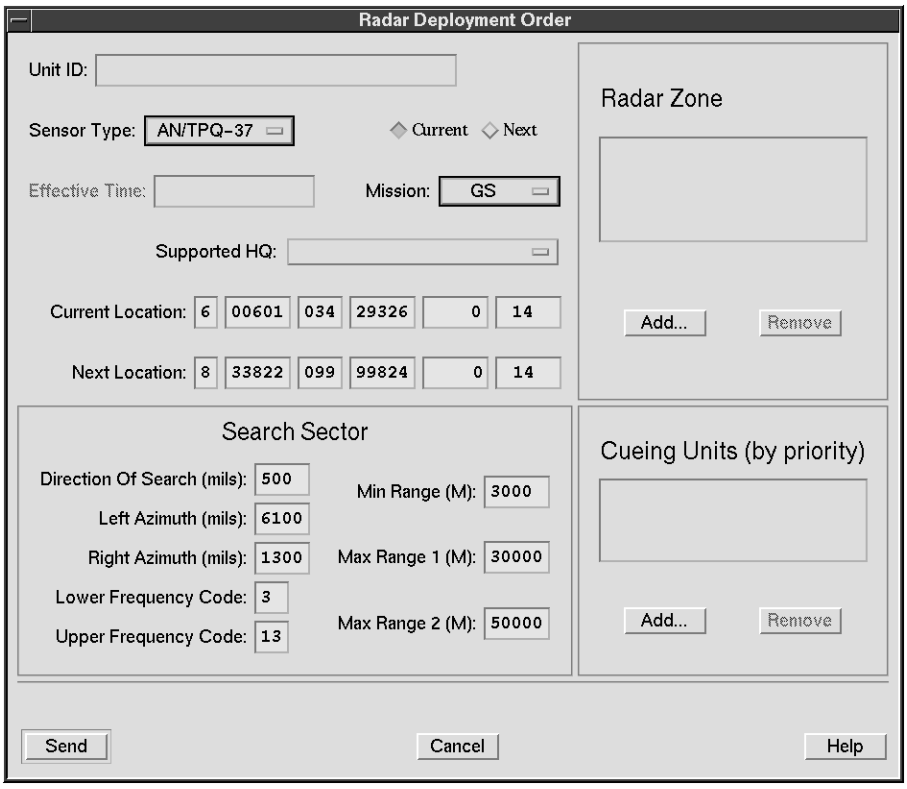

Figure G-3. Radar Deployment Order (AFATDS)

The radar will not receive the RDO itself. The AFATDS will convert data in the RDO to the SPRT;SEARCH and SPRT;FILTER formats for transmition to the radar unit. Complete procedures for the AFATDS RDO can be found in TM 11-7025-297-10 and TB 11-7025-297-10. From an IFSAS equipped unit the operator sends SPRT;SEARCH and one or more SPRT;FILTER messages

to the radar. Regardless of who sends the information, the radar will receive the following information:

- Radar Search Area Message (SPRT;SEARCH). This message is used to provide the radar with new search area data. If the RADIATE ON switchlamp is lit, the message is followed by **CAUTION** SET RADIATE OFF BEFORE ENTERING DATA. If the message data is unCAKed, it may be semi-automatically stored by entering function code 20 and answering yes to the RSDSTORE? prompt. Otherwise, you must unCAK the data and enter it manually using function code 20. See Figure G-4.

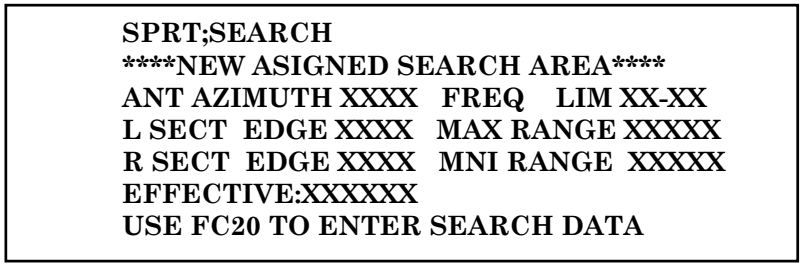

Figure G-4. Assigned Search Area.

- Priority/Censor Zone Message (SPRT;FILTER). This message is used to provide the radar with data for adding or deleting priority or censor zones. Each zone message contains the coordinates of up to three zone points. If a zone is defined by more than three points, then two zone messages are required. If the entire set of zone points has been received, ZONE MESSAGE COMPLETE is displayed. Otherwise, ADDITIONAL ZONE MESSAGE REQUIRED is displayed. A complete zone data message is automatically stored if all of the following conditions are met:
  - One is operating in secure mode.
  - Sequence number is correct,
  - Data not CAKed, and zone data valid. ZONE DATA STORED is then displayed, and no operator action is needed.

If you are operating in unsecure mode and the message data is unCAKed, you may store the new zone semi-automatically by entering function code 26 and answering yes to the **ZONESTORE?** prompt. Otherwise, you must unCAK the message data off-line and enter it manually. See Figure G-5.

```
TACFIRE-R-3BINDX:16   MRN=0   HHMMSS
SPRT;FILTER
**********NEW ASSIGNED ZONE**** ******

ZONE TYPE:XXX              ZONE NUMBER:X
1E:XXXXXX          1N:XXXXXXX      GZI :X
2E:XXXXXX          2N:XXXXXXX
3E:XXXXXX          3N:XXXXXXX

IFSAS SEQ INDEX IS OK

ZONE MESSAGE COMPLETE

XXX  ZONE  X  STORED
```

Figure G-5. Assigned Zone

If you receive this message from an AFATDS equipped unit you will first receive a delete filter message for each of the one to nine zones you have stored. Behind the delete messages you will have the new filter or filters.